

# ARHGAP10 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10695b

#### Specification

## **ARHGAP10** Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Antigen Region WB, IHC-P, FC,E <u>A1A4S6</u> <u>O08DP6</u>, <u>NP\_078881.3</u> Human Bovine Rabbit Polyclonal Rabbit IgG 237-263

## **ARHGAP10** Antibody (Center) - Additional Information

Gene ID 79658

#### **Other Names**

Rho GTPase-activating protein 10, GTPase regulator associated with focal adhesion kinase 2, Graf-related protein 2, Rho-type GTPase-activating protein 10, ARHGAP10, GRAF2

#### Target/Specificity

This ARHGAP10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 237-263 amino acids from the Central region of human ARHGAP10.

**Dilution** WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

ARHGAP10 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **ARHGAP10** Antibody (Center) - Protein Information

Name ARHGAP10



# Synonyms GRAF2

**Function** GTPase-activating protein that catalyzes the conversion of active GTP-bound Rho GTPases to their inactive GDP-bound form, thus suppressing various Rho GTPase-mediated cellular processes (PubMed:<u>11432776</u>). Also converts Cdc42 to an inactive GDP-bound state (PubMed:<u>11432776</u>). Essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases. Inhibits PAK2 proteolytic fragment PAK-2p34 kinase activity and changes its localization from the nucleus to the perinuclear region. Stabilizes PAK-2p34 thereby increasing stimulation of cell death (By similarity). Associates with MICAL1 on the endosomal membrane to promote Rab8-Rab10-dependent tubule extension. After dissociation with MICAL1, recruits WDR44 which connects the endoplasmic reticulum (ER) with the endosomal tubule, thereby participating in the export of a subset of neosynthesized proteins (PubMed:<u>32344433</u>).

## **Cellular Location**

Cytoplasm. Cytoplasm, perinuclear region. Cell membrane. Endosome membrane. Note=Association to cell membrane is dependent on PH domain. Colocalized with MICAL1, RAB8A, RAB8B and RAB10 on endosomal tubules (PubMed:32344433). {ECO:0000250, ECO:0000269|PubMed:32344433}

## **Tissue Location**

High levels of expression in heart and skeletal muscle.

# ARHGAP10 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## ARHGAP10 Antibody (Center) - Images

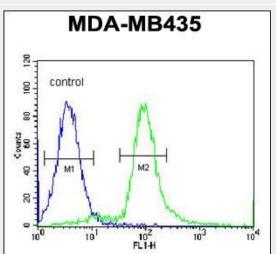
MDA-MB435 250 130 95 72-4 55

ARHGAP10 Antibody (Center) (Cat. #AP10695b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the ARHGAP10 antibody detected the ARHGAP10 protein (arrow).





ARHGAP10 antibody (Center) (Cat. #AP10695b) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ARHGAP10 antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



ARHGAP10 Antibody (Center) (Cat. #AP10695b) flow cytometric analysis of MDA-MB435 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# ARHGAP10 Antibody (Center) - Background

GTPase activator for the small GTPases RhoA and Cdc42 by converting them to an inactive GDP-bound state. Essential for PTKB2 regulation of cytoskeletal organization via Rho family GTPases. Inhibits PAK2 proteolytic fragment PAK-2p34 kinase activity and changes its localization from the nucleus to the perinuclear region. Stabilizes PAK-2p34 thereby increasing stimulation of cell death (By similarity).

# ARHGAP10 Antibody (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) : Azzato, E.M., et al. Cancer Epidemiol. Biomarkers Prev. 19(4):1140-1143(2010) Lind, P.A., et al. Twin Res Hum Genet 13(1):10-29(2010) Takefuji, M., et al. J. Hum. Genet. 55(1):42-49(2010) Marroni, F., et al. Circ Cardiovasc Genet 2(4):322-328(2009)